Science 2002
Performance Definitions

Grade 5

Exceeded Level

With respect to the elementary school Michigan Science Curriculum Framework, a student who scored at the "Exceeded" level of the Michigan standards in science:

- demonstrated deep knowledge, understanding and skill in earth, life and physical science by generating or connecting the relationships among ideas and concepts across these branches of science.

- used his or her knowledge to describe and/or explain real-world events as well as understand prediction of future observations and outcomes.

- solved problems using scientific knowledge and information from resources such as tables, graphs and text.

- has analyzed and reflected about real-world situations using his or her science knowledge and understanding.

Students who performed at the "Exceeded" level:

- made predictions, followed investigation procedures, manipulated simple materials, and read graphs and diagrams.

- demonstrated reliable knowledge by using simple scientific tools to observe and collect data as well as obtain accurate measurements.

- prepared appropriate and clearly labeled data tables and bar graphs to present scientific information.

- consistently recognized examples of the use of scientific principles in everyday life while realizing the impact of such technology on the natural world.

- correctly, completely, and thoroughly answered questions without contradiction; answers provided examples, evidence, or elaboration.

Science 2002
Performance Definitions

Grade 5

Met Level

With respect to the elementary school Michigan Science Curriculum Framework, a student who scores at the "Met" level of the Michigan standards in science:

- demonstrated knowledge, understanding and skill in earth, life and physical science by recognizing the relationships among ideas and concepts across these branches of science.
- used his or her own knowledge to describe and/or explain real-world objects or events.
- developed solutions for problems using scientific information from resources such as tables, graphs and text.
- can judge and use evidence and reason to make a scientific explanation.

Students who performed at the "Met" level:

- followed investigation procedures, manipulated simple materials, and read graphs and diagrams.
- demonstrated knowledge of simple scientific tools to make observations and obtain measurement.
- prepared and used simple data tables and bar graphs.
- consistently recognized examples of technology in everyday life.
- provided complete answers to questions without contradiction; answers were supported with some evidence and some elaboration.

Science 2002
Performance Definitions

Grade 5

Basic Level

With respect to the elementary school Michigan Science Curriculum Framework, a student who scored at the "Basic" level for Michigan standards in science:

- demonstrated a knowledge of earth, life and physical science; does not however recognize relationships among these three branches of science.
- used his or her own knowledge partially to describe and/or partially explain real-world objects or events.
- gathered information for scientific problems from resources such as tables, graphs and text.
- demonstrated a limited capacity to judge evidence or develop scientific reasons for explanation of observations and events.

Students who performed at the "Basic" level:

- followed simple investigation procedures, indicated some difficulty with manipulation of materials, and had some difficulty reading graphs and diagrams.
- demonstrated incomplete knowledge about using tools to make observation and measurement.
- showed some ability to prepare and use data tables and bar graphs.
- inconsistently recognized examples of technology in everyday life.
- provided partially correct answers to questions that included some error or contradiction; answer lacked sufficient evidence or elaboration.